January 10, 1989
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KANSAS CITY DISTRICT, CORPS OF ENGINEERS
LAKE ONTARIO ORDNANCE WORKS

ACRES RESPONSE TO REVIEW COMMENTS: DRAFT REMEDIAL INVESTIGATION REPORT

Reviewer: Yaruz Erk, P.E.
New York State Department of Environmental Conservation

Review Date: December 9, 1988

GENERAL

1) Although further investigation of certain areas is recommended, no attempt has been made to define the site specific compounds list to be used for soil/sediment and groundwater investigation.

2) Furthermore, minimum action levels of these compounds that might be present in the investigated media should be defined to that additional work can proceed without delay.

Response:
Acres contacted Mr. Erk to clarify these two general comments. During the discussion the following responses were provided by Acres:

Response to No. 1 Above: Mr. Erk clarified that he was referring to the possibility of providing a reduced listing of required analytical parameters for the additional recommended sampling based on the initial sampling results. Such an approach was suggested as a possible cost savings approach.

Acres indicated that they are planning on considering such an approach, if feasible, for the additional sampling recommended for Areas A and B. However, the applicability of such a listing for ongoing investigation of USAF Plant No. 68 and other LOOW site areas with potential unknown contaminants would most likely be unfeasible.

Response to No. 2 Above: Mr. Erk clarified that his comment was in reference to the defining of ARAR's for clean-up criteria to serve as a basis for the FS. He offered several sources that may be helpful in defining the ARAR's.

Acres explained that these action level criteria were being established during the feasibility study. It was agreed that Acres would utilize any information and/or input that NYSDEC had to offer.

SPECIFIC COMMENTS

Area A

1) It is clear that the presence of buried drums has resulted in soil and groundwater contamination in the vicinity of the drums. Fortunately, the groundwater samples from monitoring wells which were installed 300 ft to the northwest of the buried drums do not appear to have been impacted by migration of the contaminants. However, it should be noted that the rate of groundwater migration through the upper glacial tills is on the order of 0.1 ft/yr. Therefore, contamination contamination should not yet have migrated to wells MW-A-1s and MW-A-ld. Additional wells which are located closer to the contaminant source are needed to determine the extent of groundwater contamination in the vicinity of the buried drums.

Response:
The downgradient monitoring wells for Area A were located as close as accessibly possible to the predefined boundary of this area. In view of the very low rate of groundwater migration within the upper tills, it has been concluded that additional monitorin wells will not add any significant additional information on c ntaminant migration. The problems in this area have been determined to be localized in nature and will be dealt with accordingly.

Area B

1) As is the case for Area A, additional wells are needed to determine the extent of contamination in the vicinity of the buried drums.

Response:
Similar to Area A, the downgradient monitoring wells for Area B were placed as close as accessibly possible to the predefined boundaries of this area. Similarly, the problems in this area have been determined to be localized in nature and will be dealt with accordingly.

2) The March 1988 "Interim Report on Well MW7-3S Investigation, Model City TSD Facility, Model City, New York" which was submitted to the NYSDEC by CWM Chemical Services, concludea that the contamination found in Well MW7-3S and soil samples to the north and west of that well is "....associated with the Olin Burn Area....".

That conclusion appears to conflict with the conclusion on page 10-2 of the Acres report which states "These contaminants cannot be directly related to the previous burn pit activities and possibly are a result of another onsite source". This apparent conflict needs to be resolved through further investigation.

Response:
The compounds carbon tetrachloride, chloroform, and methylene chloride, which were detected in monitoring well MW-7-3S, were not found to be present in either the surface water or sediment samples collected and analyzed from Area B (the Olin Burn Pit). In addition, theee specific compounds were not identified as being used in the Air Force Plant 68 process. Based upon this information a correlation between these contaminants and the Olin Burn Pit or Air Force Plant 68 process could not be established.

3) The NYSDEC does not consider the list of "potentially present" compounds set forth in Table 4-8 to be inclusive of all the compounds which may be associated with past government activities at the site. For example, acetone does not appear on the list in Table 4-8, yet acetone was the "primary compound" observed in the volatile fraction of the six drums which were tested in Area A.

Response:
The list of potentially present compounds presented in Table 4-8 was compiled based upon a background literature review that specifically identified those compounds used in the high energy fuels process. The list does not represent the results of any sample analyses. In addition, a direct relationship between the drums found in Area A and past Department of Defense activities has not been established.

Area C & Area North of C

1) The groundwater elevation observed in well MW-C-3S, 300,43 ft. is inconsistent with the historical groundwater elevation data base from CWM well5 in the vicinity of MW-C-3S.

Response:
As mentioned in the report, monitoring well MW-C-3S had a very slow recharge rate. It is likely that the water level obtained at the time of sampling does not represent completely stabilized static conditions.

2) The Acres report concludes that there is "...no evidence of buried drums or associated contaminated conditions that would warrant further investigation." The data presented in the January, 1988 "Interim Report, P-12-2S Investigation, SLF 12 Area, Model City Facility" prepared by Golder Aseociatee for CWM (Chemical Waste Management) suggest5 that the source of the soil and groundwater contamination found along and to the east of Access Rd. #2 may be in Area C.

That contamination, of which the primary constituent6 are carbon tetrachloride and chloroform, may be related to past DoD activities. Further identification of the probable source and extent of the contaminants is needed.

Response:
As previously mentioned, these contaminant6 have not been identified in any of the past Department of Defense activities. In addition, with the relatively low groundwater migration rate through the upper tills, the contamination would be localized and is not likely to have migrated from Area C. COE responsibilities with respect to identifying the probable source and extent of these contaminants is questioned at this time since no link with past government activities has been established. However, this will be a topic for discussion at the meeting scheduled for February 9, 1989 with the COE, NYSDEC, and EPA.

Acid and TNT Wastelines

1) Additional investigation is needed to identify the environmental impacts of these lines. It is suggested that the contractor seek the assistance of CWM to identify areas where the lines are likely to be present. In addition, the use of geophysical techniques to locate the lines should also be considered.

Response:
Acres has made an extensive effort to locate the acid and TNT wastelines. Prior to initiating any test pit excavation activities to locate the Acid and TNT wastelines, Acres personnel performed the following activities:

- Conducted discussions with CWM employees knowledgeable of past TNT wasteline excavations including field identification of possible excavation locations; and
- Reviewed maps of the former TNT Plant layout. The maps included waeteline locations; pipe compositions and sizes, and invert elevations.

In addition, Acres consulted with the geophysical subcontractor, Delta Geophysical, regarding geophysical investigations to detect the vitrified clay waste lines. Delta Geophysical's conclusions were in agreement with those of A-Cubed, the geophysical consultant used by Golder Associates (CWM's consultant). In a letter dated November 9, 1987 from A-Cubed to Golder Associates, A-Cubed stated that non-metallic pipes are detectable by EM and magnetics only if the line contains a magnetic electrical property contrast and that ground penetrating radar, the preferred method for detecting non-metallic pipe, would probably not work due to the natural soil conditions at the site. In view of this assessment, it has been concluded that a geophysical survey for the purpose of locating the lines would be unproductive in terms of providing reliable information on locations.

Additional Areas of Possible Contamination

1) Section 4.2 describes "Several other areas which could potentially be contaminated with hazardous wastes". However, the RI/FS report does not contain any recommendation for the investigation of the areas identified in Section 4.2. It is the NYSDEC position that additional investigation, and possibly, remediation are needed at those areas. The DOD has a responsibility to initiate an RI/FS Program to address the environmental impacts associated with past government activities in those areas.

Response:
As mentioned in the introductory chapter of the RI Report, additional portions of the LOOW site have been identified as potentially contaminated areas and will be investigated and reported separately under subsequent site remedial investigations. Specific investigation plans for these other LOOW site areas will be discussed further at our meeting scheduled for February 9, 1989.